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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,576	07/07/2003	David Knight		4480
7590 08/12/2004			EXAMINER	
Norman B. Rainer 2008 Fondulac Road Richmond, VA 23229			ARYANPOUR, MITRA	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/613,576	Applicant(s) KNIGHT, DAVID <i>cd</i>	
	Examiner Mitra Aryanpour	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7 July 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "12" and "19" have both been used to designate balls (see pages 6 and 7). Additionally the drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "19" has been used to designate both balls and rearward row. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: Reference characters "12" and "19" have both been used to designate balls (see pages 6 and 7). Appropriate correction is required.
3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in claim 4, said frame is of continuous integral construction.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Chase (1,052,461).

Regarding claim 1, Chase discloses a billiard ball rack device comprising: a frame comprised of two straight side walls (two forwardly converging side bars 1, 1) which converge at a 60 degree angel to produce a forward apex (the frame has equilateral sides which form 60 degree angles) and extend rearward to divergently separate rear extremities, and a straight back wall (rear cross bar 2) which joins said rear extremities in coplanar juxtaposition with said side walls to reproduce a frame of substantially equilateral triangular shape defining an enclosed interior region which accommodates 15 regulation billiard balls in closely packed formation (see figure 1), wherein a rearward row of 5 balls is positioned adjacent said back wall (again see figures 1 and 2), an elongated flat compression plate (follower or presser bar 3) disposed against the interiorly directed surface of said back wall (2) and bounded in part by a straight upper edge located above said back wall, and a lower edge pivotably joined to said back wall in a manner permitting forward and downward rotative movement of said compression plate in an arcuate path orthogonal to the plane of said frame (see columns 1 and 2, lines 52-68), and restoring means (spring 7) interactive between said back wall (2) and compression plate (3) and biasing said compression plate toward said back wall (see

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figure 3), whereby manual pushing force applied to said compression plate causes said compression plate to contact said rearward row of ball with a downward and forward force in a manner which drives all the ball within said interior region toward said apex and into interconnecting relationship.

Regarding claim 2, Chase shows said frame (two forwardly converging side bars 1 and rear cross bar 2) is dimensioned such that when said billiard balls are drive toward said apex by said compression plate, a space is caused to exist between said rearward row of 5 balls and said back wall, said space permitting slight forward movement of said device upon removal from said intercontacting balls (see figures 1 and 3).

Regarding claim 3, Chase shows said restoring means is two-spaced apart coil springs (7; see figure 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chase (1,052,461).

Regarding claim 4, Chase shows that the side bars and cross bar are rigidly connected at their ends (see column 1 lines 44-51) to form a one-piece frame. Chase does not disclose expressly that the frame is a continuous integral construction. To the extent if one argues that the frame of Chase is not formed of one-piece, it would have been obvious to one having ordinary skill in the art to integrally form the frame of Chase, since

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it has been held that forming a one-piece article which had formerly been formed in two-pieces and put together would have been a matter of obvious engineering choice. In re Larson, 144 USPQ 347 (CCPQ 1965); In re Lockart, 90 USPQ 214 (CCPA 1951).

Regarding claim 5, Chase does not disclose expressly the contact angle to be between 60 and 70 degrees. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide a contact angle between 60 and 70 degrees, because Applicant has not disclosed that providing a contact angle between 60 and 70 degrees, provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the contact angle taught by Chase or the claimed contact angle because both contact angles perform the same function of pushing the balls forwardly into the forwardly tapering space of the frame and allowing the balls to be engaged firmly against each other for accurately setting up the balls on the table. Therefore, it would have been an obvious matter of design choice to modify Chase to obtain the invention as specified in claim 5.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Beauchamp; Fischer; Sowa; Cook; Volpe '677; Budde; Madigan; Meacham; Pierce; D'Abramo; Volpe '939; Kintz.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Aryanpour whose telephone number is 703-308-3550. The examiner can normally be reached on Monday - Friday 9:00 to 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MA
6 August 2004



MITRA ARYANPOUR
PATENT EXAMINER